Briefing:



Forest Practices Compliance Monitoring DEPARTMENT OF NATURAL RESOURCES --

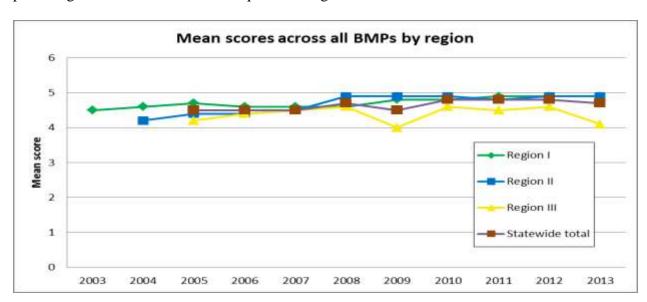
April 2014 DIVISION OF FORESTRY

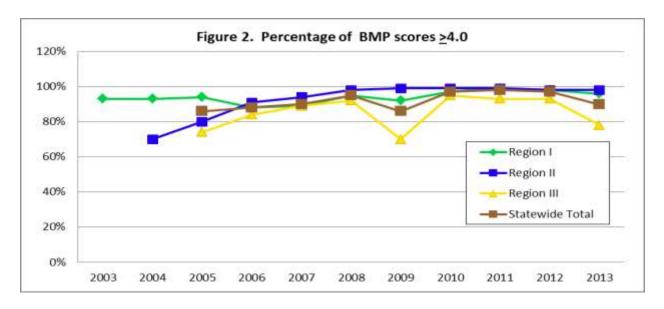
Background. The Alaska Forest Resources and Practices Act (FRPA) is designed to protect fish habitat and water quality during forestry operations. FRPA (AS 41.17) and the best management practices (BMPs) in its regulations (11 AAC 95) govern timber harvesting, reforestation, and road design, construction, maintenance, and closure. The Act requires compliance monitoring and effectiveness monitoring to ensure that the resource protection goals are met. Compliance monitoring assesses whether timber operations are properly implementing FRPA and its regulations. Effectiveness monitoring evaluates whether the BMPs successfully protect water quality and fish habitat if they are implemented properly.

Compliance monitoring program. The Division of Forestry (DOF) conducts compliance monitoring as part of its field inspections of forest operations on state, municipal, private, and trust land. The Division has compiled eleven years of data for Region I (coastal Alaska from Kodiak Island through Southeast), eleven years for Region II (the rest of southcentral Alaska), and ten years for Region III (interior Alaska).

Division foresters complete compliance monitoring score sheets for applicable best management practices during field inspections. Each BMP is rated on a scale from 1 (rarely and ineffectively implemented) to 5 (consistently and effectively implemented). Any scores less than 4 are highlighted for follow-up with training and, if necessary, enforcement actions.

Results. Since 2003, the Division has compiled nearly 20,000 individual field ratings of best management practices. In 2013, the agencies conducted 211 field inspections on forest operations statewide and compliance monitoring score sheets were part of every inspection. The data shows solid implementation rates in all regions. Overall, Regions I and II averaged 4.9 out of 5.0 on the ratings, and Region III scored 4.1. Figures 1 and 2 show the mean scores for each region and the percentage of BMP scores that are equal to or higher than 4.0.¹





The ratings for Region III demonstrate the importance of the compliance monitoring program. In 2009, compliance monitoring revealed numerous road maintenance issues on state land in Interior Alaska, and the proportion of scores equal to or above 4.0 dropped to 70%. The state responded with a funding increment for road maintenance, and the Division of Forestry was able to strengthen maintenance activities and fix the problems. Road maintenance problems identified in 2013 compliance monitoring in Region III will be addressed in the 2014 field season.

Road condition surveys. The Division of Forestry and the Department of Fish and Game (ADF&G) Habitat Division have also conducted joint road condition surveys in Southeast and Southcentral Alaska. The surveys determine whether the roads, bridges, and culverts are properly maintained or closed and whether the stream crossing structures are passing fish. Many of the older roads were built and closed out prior to the 1993 adoption of the BMPs. Where surveys identify fish passage problems, the agencies measure the extent of upstream fish habitat to help prioritize remediation work. The surveys also assess reforestation in harvest units along the roads.

<u>Southeast surveys</u>. From 2004 through 2010, the agencies surveyed 829 (out of 3220 total) miles of inactive and closed roads in Southeast including evaluations of all the stream crossings on these roads. The surveys found significant fish passage problems on only 20 of the 109 fish culverts evaluated. One was replaced by a bridge and four were replaced by more sufficient culverts. Overall results showed no other fish passage problems, as all crossings occupied by bridges were fully functional and many road systems were closed with culverts removed and natural drainage reestablished.

<u>Southcentral surveys</u>. Between 2011 and 2013, DOF and ADF&G surveyed 276 miles of active, inactive, and closed roads on the Kenai Peninsula and around Tyonek. In 2014, the agencies will complete surveys of the roughly six miles of forest road on the central Kenai Peninsula and begin new surveys on the south side of Kachemak Bay. Results to date show that on the Kenai, most roads are in good shape with a high percentage of crossing structures adequately providing for fish passage. Full results of the Kenai Peninsula Borough forest road inventory should be

available at the end of 2014. Upstream habitat surveys began on the low rated fish culverts in October 2013 to determine how much fish habitat will be extended by repair or replacement of the structure. The habitat surveys will be complete after the 2014 field season.

In the Tyonek area, the forest roads were in excellent shape and many are now being utilized for oil and gas exploration. Routine maintenance is actively taking place. On one section of forest road, four of six culverts were rated low for their ability to pass fish, and will need surveys to determine how much upstream habitat would become available upon replacement. Much of the forest road system in Tyonek was built prior to the enactment of FRPA in 1990.

Summary. Systematic compliance monitoring and extensive road conditions surveys demonstrate that forest operations have an excellent record of FRPA implementation. Monitoring has identified few problems, and where compliance is insufficient, the agencies and landowners have responded with training and remediation to fix the problems.

¹ Note: The sample size for the first year of monitoring in Region II was too small to calculate meaningdul averages and percentages, therefore the graphs do not include the first year of Region II data.